

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Kenji YOKOYAMA et al.

Application No./Patent No.: 10/591,335 Filed/Issue Date: August 31, 2006

Entitled: METHODS FOR PRODUCING MICROCHANNEL CHIPS, MICROCHANNEL CHIPS, METHODS FOR SEPARATING BIOMOLECULES USING THE MICROCHANNEL CHIPS, AND ELECTROPHORETIC APPARATUS HAVING THE MICROCHANNEL CHIPS

National Institute Of Advanced Industrial Science And Technology

a corporation

(Name of Assignee)

(Type of Assignee: corporation, partnership, university, government agency, etc.)

states that it is:

1. ☐ the assignee of the entire right, title, and interest; or
2. ☒ an assignee of less than the entire right, title and interest  
(The extent (by percentage) of its ownership interest is 50 %)

in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Yasushi MITSUISHI

Signature

Yasushi MITSUISHI

Printed or Typed Name

Director, Intellectual Property Department

Title

Sep. 11, 2007

Date

+81-29-862-6152

Telephone Number

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## ASSIGNMENT

WHEREAS, We, **Kenji YOKOYAMA**, a citizen of Japan, with a mailing address of c/o National Institute of Advanced Industrial Science and Technology, Tsukuba Central 4, Higashi 1-1-1, Tsukuba-shi, Ibaraki 305-8562, Japan; and **Satoshi KOIDE**, a citizen of Japan, with a mailing address of c/o National Institute of Advanced Industrial Science and Technology, Tsukuba Central 4, Higashi 1-1-1, Tsukuba-shi, Ibaraki 305-8562, Japan; have invented certain new and useful improvements in **METHODS FOR PRODUCING MICROCHANNEL CHIPS, MICROCHANNEL CHIPS, METHODS FOR SEPARATING BIOMOLECULES USING THE MICROCHANNEL CHIPS, AND ELECTROPHORETIC APPARATUS HAVING THE MICROCHANNEL CHIPS** for which an application for Letters Patent in the United States was filed as PCT International Application Number **PCT/JP2005/003604** on **03 March 2005** and assigned U.S. Serial Number **10/591,335**;

AND WHEREAS, **NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY**, with it's principal place of business at **3-1, Kasumigaseki 1-chome, Chiyoda-ku, Tokyo 100-8921, Japan**, desires to acquire the entire right, title and interest in and to the said improvements and the said Application:

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said **NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY**, its successor, legal representatives and assigns, the entire right, title and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said **NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY**, its successor, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said **NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY**, its successor, legal representatives and assigns, any facts known to us respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said **NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY**, its successor, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 29<sup>th</sup> day  
of May, 2007.

K. Yokoyama  
**Kenji YOKOYAMA**

Witnessed: Atsushi Hiratsuka

Name Atsushi Hiratsuka

Address 2-6-1-402,  
Kaminomiya, Tsurumi,  
Tokohara, Kanagawa, Japan

Date: May 29, 2007

Witnessed: Hideki Kinoshita

Name Hideki Kinoshita

Address 3-16-1, Miyashiro Hontyo,  
Sagamihara, Kanagawa,  
Japan

Date: May 29, 2007

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 29<sup>th</sup> day  
of May, 2007.

S. Koide  
**Satoshi KOIDE**

Witnessed: Yohei Inaba

Name Yohei Inaba

Address 1-5-3-301  
Sagamihara, Sagamihara city  
Kanagawa, Japan

Date: May 29, 2007

Witnessed: Nobumitsu Niina

Name Nobumitsu Niina

Address 2-25-2-104  
Nishikatakura, Hachioji,  
Tokyo, Japan

Date: May 29, 2007

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Kenji YOKOYAMA et al.

Application No./Patent No.: 10/591,335 Filed/Issue Date: August 31, 2006

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KATAYANAGI INSTITUTE, a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☐ the assignee of the entire right, title, and interest; or
2. ☒ an assignee of less than the entire right, title and interest  
(The extent (by percentage) of its ownership interest is 10 %)

in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Ko Katayanagi  
Signature

ko katayanagi  
Printed or Typed Name

Chairman  
Title

September 10, 2007  
Date

+81-42-637-1111  
Telephone Number

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

2-25-13-702, Nishihara, Shibuya-ku, Tokyo 151-0066,

ASSIGNMENT

K. Y. ✓ WHEREAS, We, **Kazuyoshi YANO**, a citizen of Japan, with a mailing address of ~~1-12-6, Kitazawa, Setagaya-ku, Tokyo 155-0031~~, Japan; and **Isao KARUBE**, a citizen of Japan, with a mailing address of 2-54-10, Utsukushigaoka, Aoba-ku, Yokohama-shi, Kanagawa 225-0002, Japan; have invented certain new and useful improvements in **METHODS FOR PRODUCING MICROCHANNEL CHIPS, MICROCHANNEL CHIPS, METHODS FOR SEPARATING BIOMOLECULES USING THE MICROCHANNEL CHIPS, AND ELECTROPHORETIC APPARATUS HAVING THE MICROCHANNEL CHIPS** for which an application for Letters Patent in the United States was filed as PCT International Application Number **PCT/JP2005/003604** on **03 March 2005** and assigned U.S. Serial Number **10/591,335**;

AND WHEREAS, **KATAYANAGI INSTITUTE**, with it's principal place of business at **1404-1, Katakura-machi, Hachioji-shi, Tokyo 192-0981, Japan**, desires to acquire the entire right, title and interest in and to the said improvements and the said Application:

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said **KATAYANAGI INSTITUTE**, its successor, legal representatives and assigns, the entire right, title and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said **KATAYANAGI INSTITUTE**, its successor, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said **KATAYANAGI INSTITUTE**, its successor, legal representatives and assigns, any facts known to us respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said **KATAYANAGI INSTITUTE**, its successor, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 23rd day of May, 2007.

Witnessed: Takuo Akimoto  
Name Takuo Akimoto  
Address 3-6-22, Higashi Toyoda,  
Hino-shi, Tokyo  
191-0052, Japan  
Date: May 23, 2007

Kazuyoshi YANO  
Witnessed: Hiroaki Miyachi  
Name Hiroaki Miyachi  
Address 2-43-5 Nakahara,  
Musashimurayama-city,  
208-0035 Tokyo, Japan.  
Date: May 23, 2007.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 16 day of May, 2007.

Witnessed: Yumiko Misawa  
Name Yumiko Misawa  
Address 649, Tate-machi,  
Hachioji-shi, Tokyo  
193-0944 JAPAN  
Date: May 16, 2007

Isao KARUBE  
Witnessed: Mifumi Shimomura  
Name Mifumi Shimomura  
Address 5-11-15, Nukukita-machi,  
Koganei-shi, Tokyo.  
184-0015 JAPAN  
Date: May 16, 2007

**STATEMENT UNDER 37 CFR 3.73(b)**

Applicant/Patent Owner: Kenji YOKOYAMA et al.

Application No./Patent No.: 10/591,335 Filed/Issue Date: August 31, 2006

Entitled: METHODS FOR PRODUCING MICROCHANNEL CHIPS, MICROCHANNEL CHIPS, METHODS FOR SEPARATING BIOMOLECULES USING THE MICROCHANNEL CHIPS, AND ELECTROPHORETIC APPARATUS HAVING THE MICROCHANNEL CHIPS

TOPPAN PRINTING CO., LTD., a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☐ the assignee of the entire right, title, and interest; or
2. ☒ an assignee of less than the entire right, title and interest  
(The extent (by percentage) of its ownership interest is 40 %)

in the patent application/patent identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

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[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

T. Hagiwara  
Signature

September 10, 2007  
Date

Tsuneaki Hagiwara  
Printed or Typed Name

+81-3-3835-5539  
Telephone Number

General Manager  
Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

## ASSIGNMENT

WHEREAS, I, **Koji SAKAIRI**, a citizen of Japan, with a mailing address of c/o Toppan Printing Co., Ltd., 5-1, Taito 1-chome, Taito-ku, Tokyo 110-8560, Japan; have invented certain new and useful improvements in **METHODS FOR PRODUCING MICROCHANNEL CHIPS, MICROCHANNEL CHIPS, METHODS FOR SEPARATING BIOMOLECULES USING THE MICROCHANNEL CHIPS, AND ELECTROPHORETIC APPARATUS HAVING THE MICROCHANNEL CHIPS** for which an application for Letters Patent in the United States was filed as PCT International Application Number **PCT/JP2005/003604** on **03 March 2005** and assigned U.S. Serial Number **10/591,335**;

AND WHEREAS, **TOPPAN PRINTING CO., LTD.**, with it's principal place of business at **5-1, Taito 1-chome, Taito-ku, Tokyo 110-8560, Japan**, desires to acquire the entire right, title and interest in and to the said improvements and the said Application:

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, I, the said inventor, do hereby acknowledge that I have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said **TOPPAN PRINTING CO., LTD.**, its successor, legal representatives and assigns, the entire right, title and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and I hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said **TOPPAN PRINTING CO., LTD.**, its successor, legal representatives and assigns, in accordance with the terms of this instrument.

AND I HEREBY covenant and agree that I will communicate to the said **TOPPAN PRINTING CO., LTD.**, its successor, legal representatives and assigns, any facts known to me respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said **TOPPAN PRINTING CO., LTD.**, its successor, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 29<sup>th</sup> day of May, 2007.

Koji Sakairi  
**Koji SAKAIRI**

Witnessed: Shunsuke Watanabe

Name Shunsuke Watanabe  
Address c/o Toppan Printing Co., Ltd.,  
5-1, Taito 1-chome, Taito-ku,  
Tokyo 110-8560, JAPAN

Date: May 29, 2007

Witnessed: Chiaki Nakajima

Name Chiaki Nakajima  
Address c/o Toppan Printing Co., Ltd.,  
5-1, Taito 1-chome, Taito-ku,  
Tokyo 110-8560, JAPAN

Date: May 29, 2007